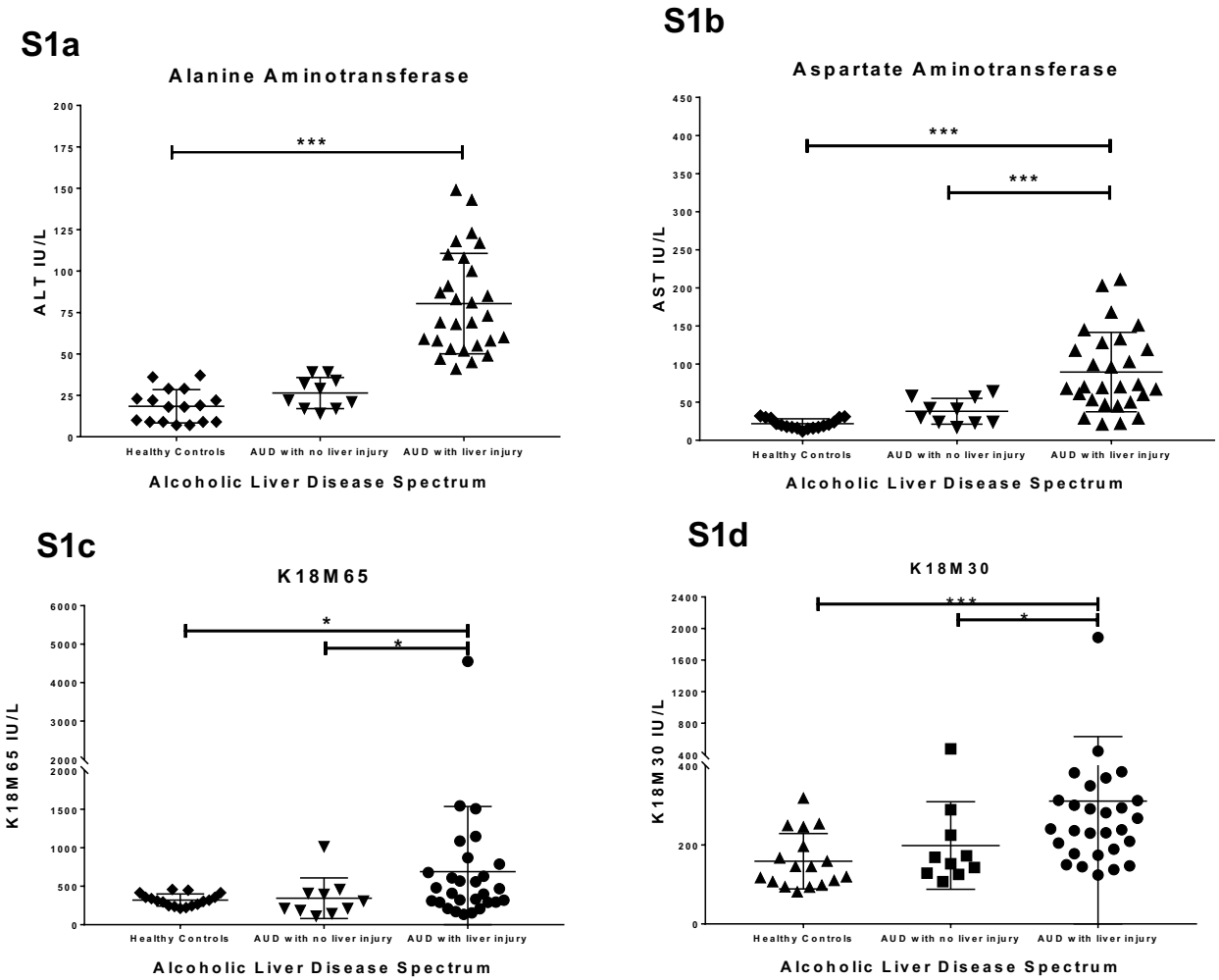
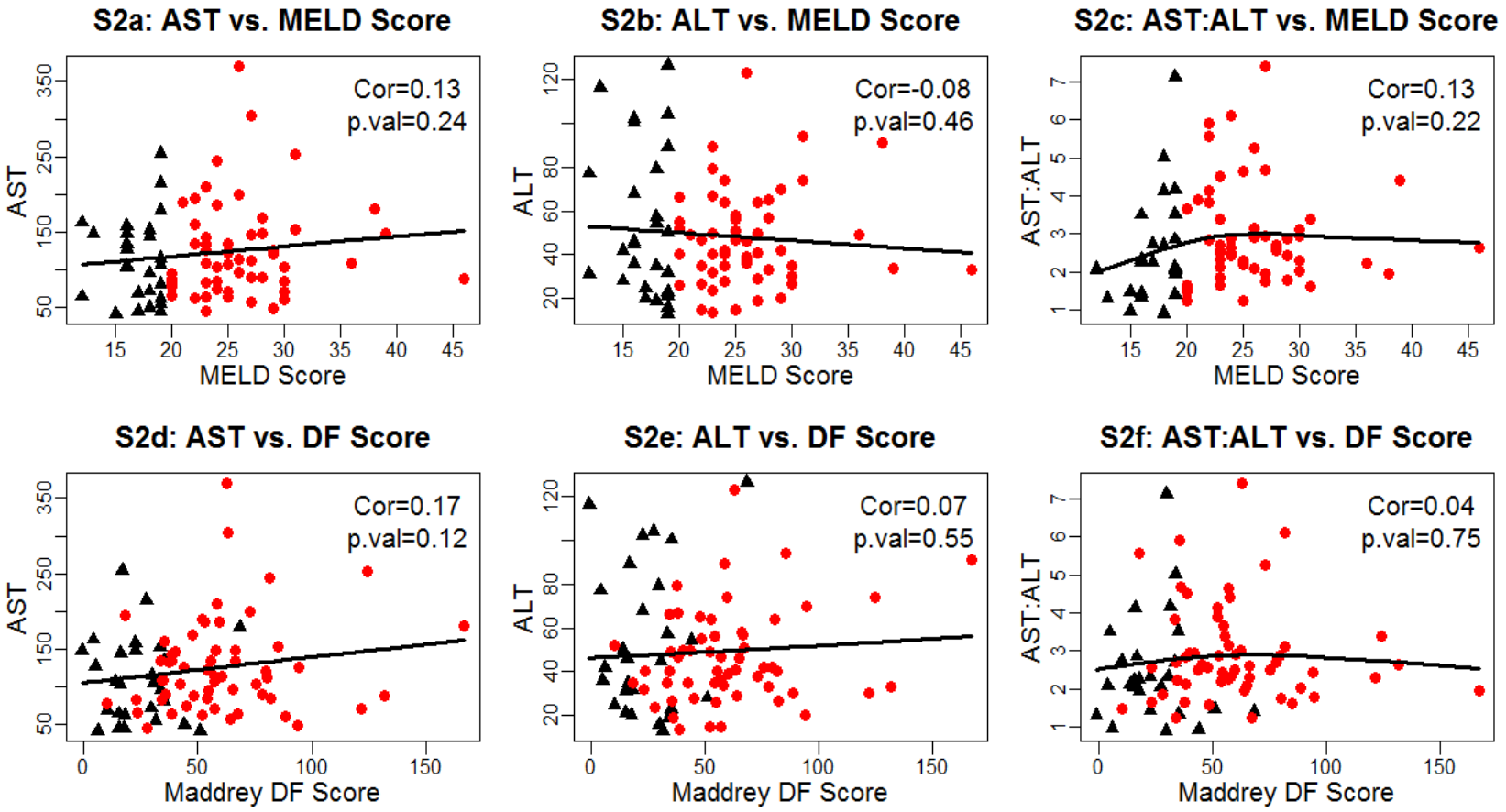
Supplement Figure 1



Supplement Figure 2



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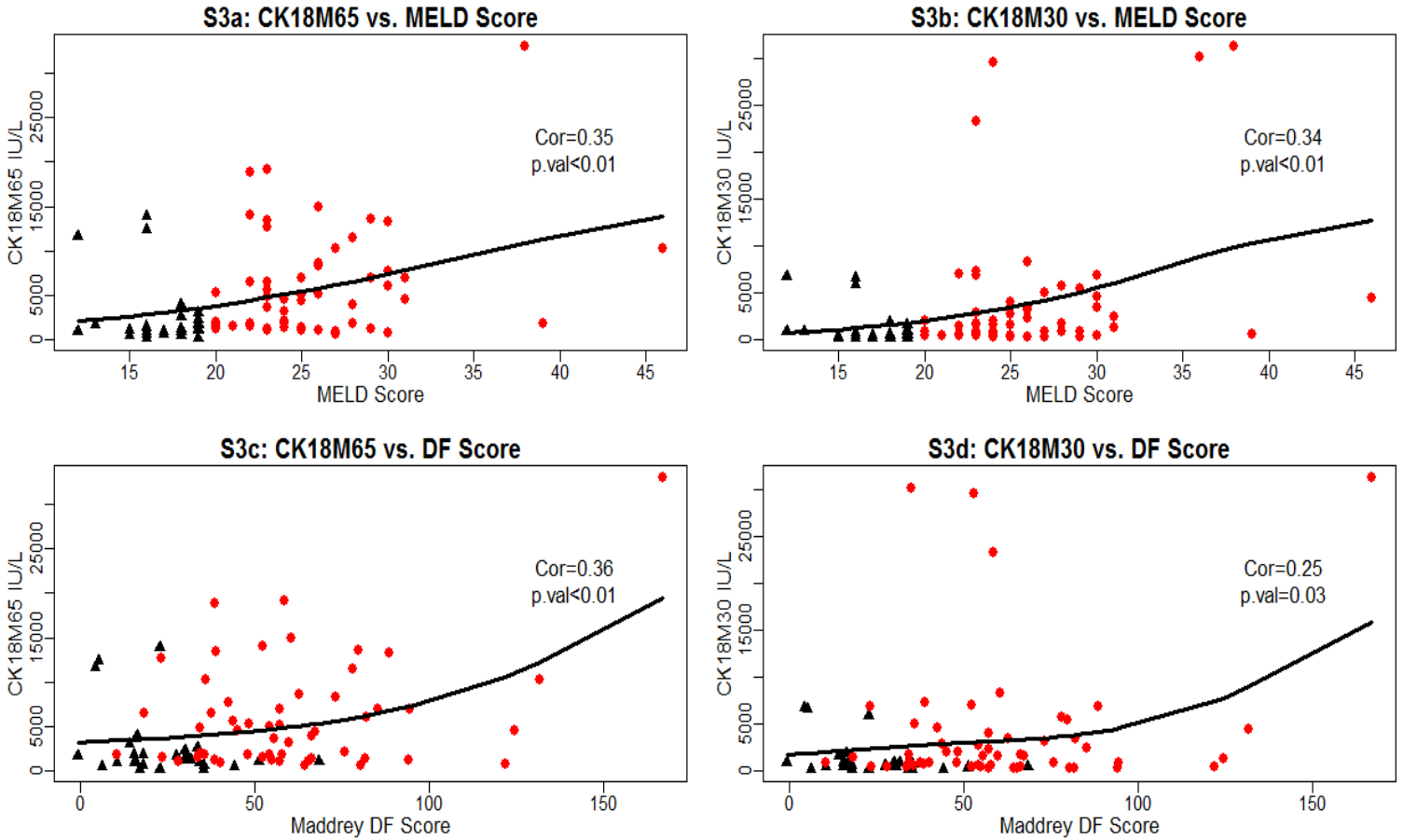
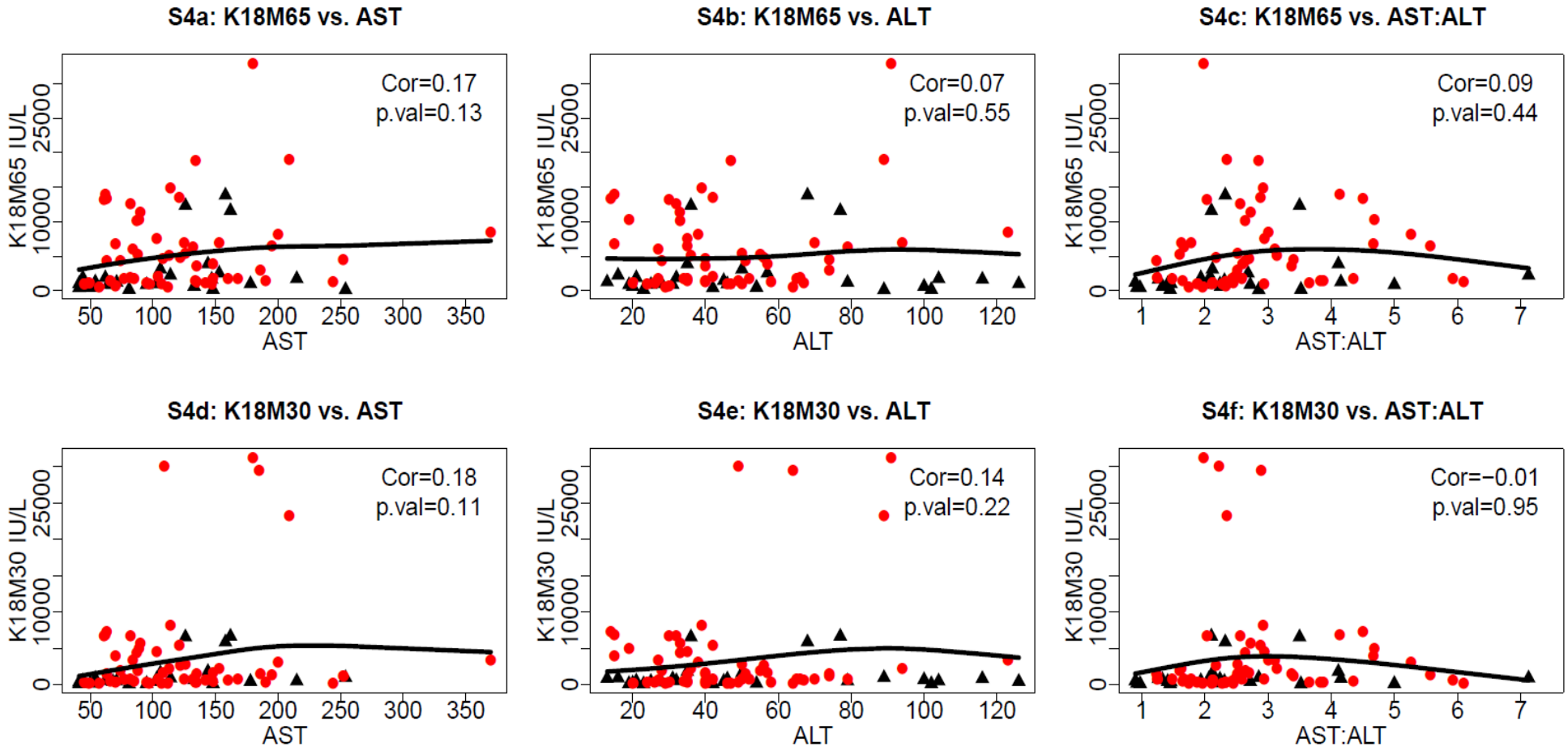
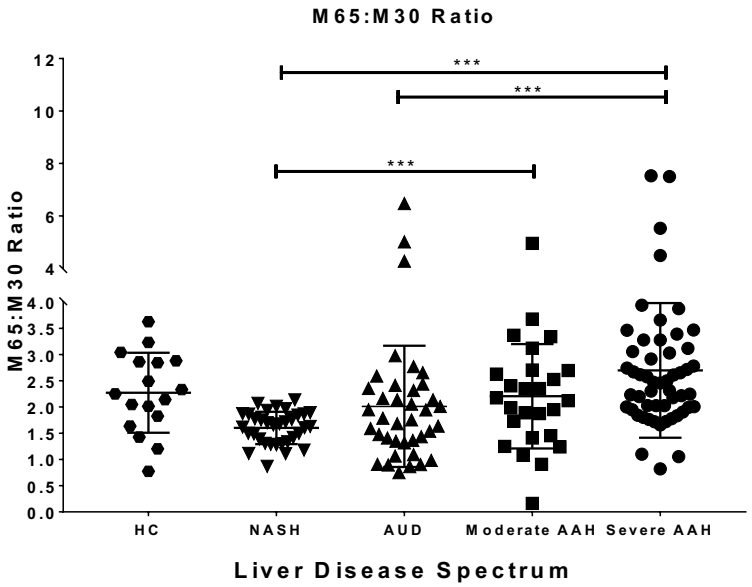


Supplement Figure 4

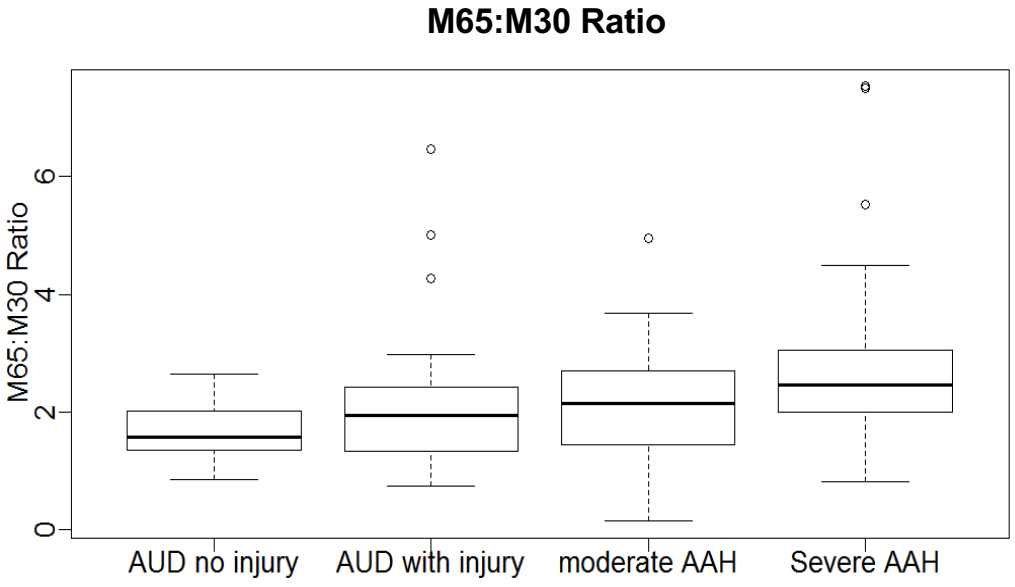


Supplement Figure 5

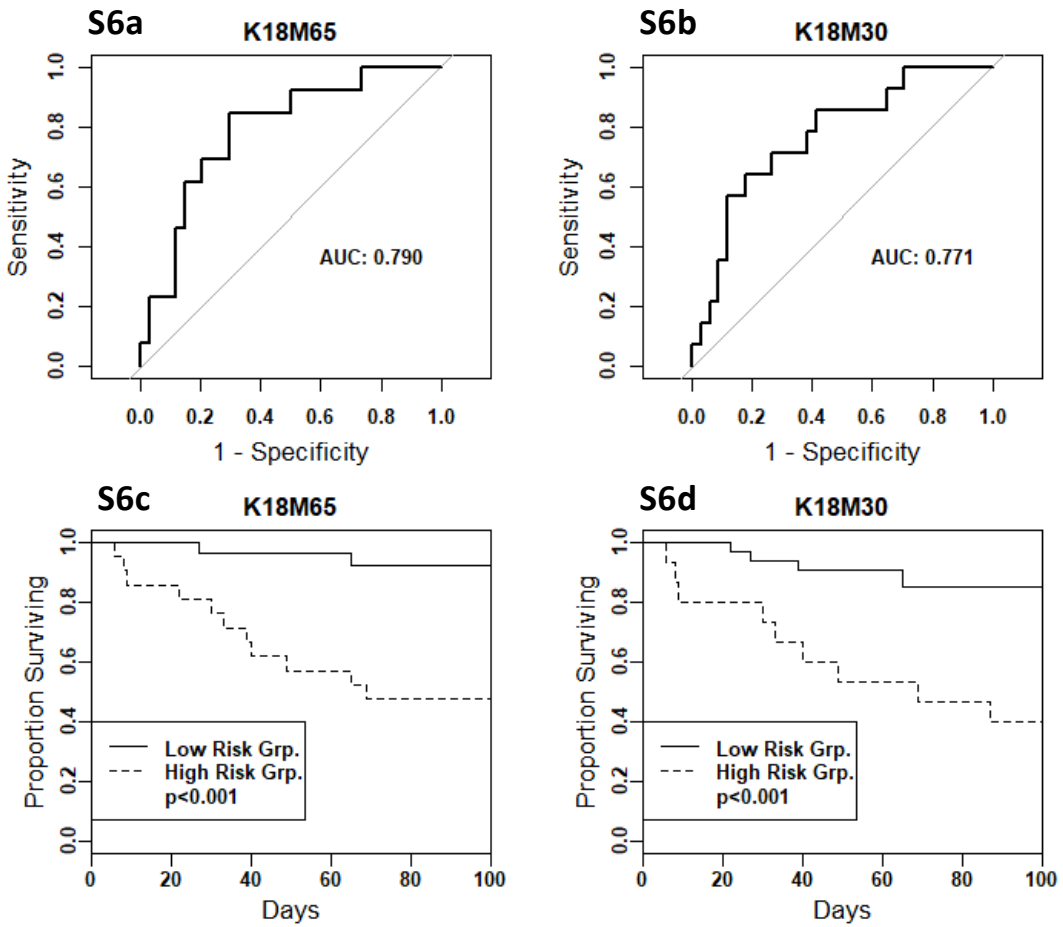
S5a



S5b



Supplement Figure 6



Supplement Information

Supplemental Figure 1: Aminotransferases and K18 in Early Liver Disease. Healthy Controls, AUD patients no liver injury and with minimal liver injury were grouped separately and compared regarding clinical markers of liver injury and hepatocyte death. Fig. S1a: ALT levels. Fig. S1b: AST levels. Fig. S1c: K18M65 levels. Fig. S1d: K18M30 levels. Data are presented as Mean ± SD. * indicates $p<0.05$, and *** indicates $p<0.001$.

Supplemental Figure 2: Association of clinical markers of acute alcoholic hepatitis. S1a: Association of AST and MELD in all AAH patients. Fig. S2b: Association of ALT and MELD in all AAH patients. Fig. S2c: Association of AST:ALT and MELD in all AAH patients. Fig. S2d: Association of AST and Maddrey DF in all AAH patients. Fig. S2e: Association of ALT and Maddrey DF in all AAH patients. Fig. S2f: Association of AST:ALT and Maddrey DF in all AAH patients. Data presented in black color depict moderate AAH patients and in red color are severe AAH patients. The Spearman correlation coefficient and the p-value are shown in each panel. The solid curve is the smoothing spline to capture the relationship between the two markers shown in each panel

Supplemental Figure 3: Association of K18 with the clinical indicators, MELD and Maddrey DF in AAH patients. Fig. S3a: Association of K18M65 and MELD in all AAH patients. Fig. S3b: Association in K18M30 and MELD in all AAH patients. Fig. S3c:

Association of K18M65 and Maddrey DF in all AAH patients. Fig. S3d: Association of K18M30 and Maddrey DF in all AAH patients. Data presented in black depict moderate AAH patients and in red show severe AAH patients. The solid curve in each panel is the smoothing spline to capture the relationship between K18 and MELD (or Maddrey) score.

Supplement Figure 4: Association of K18 protein fragments and clinical markers of liver injury, AST, ALT and AST:ALT of acute alcoholic hepatitis (AAH) in moderate and severe patients. Fig. S4a: Association of K18M65 and AST in all AAH patients. Fig. S4b: Association of K18M65 and ALT in all AAH patients. Fig. S4c: Association of K18M65 and AST:ALT in all AAH patients. Fig. S4d: Association of K18M30 and AST in all AAH patients. Fig. S4e: Association of K18M30 and ALT in all AAH patients. Fig. S4f: Association of K18M30 and AST:ALT in all AAH patients. Data presented in black color depict moderate AAH patients and in red color were severe AAH patients. The Spearman correlation coefficient and the p-value are shown in each panel. The solid curve is the smoothing spline to capture the relationship between K18 fragments and AST, ALT and AST:ALT, respectively.

Supplement Fig. 5: The M65:M30 Ratio in Liver Disease and in the Spectrum of AUD. Fig. S5a: Hepatocyte cell death ratio of K18M65:M30 across all the groups. *** indicates that $p<0.001$. Fig. S5b: Boxplot for K18M65:M30 ratio in AUD (with and without liver injury), and moderate and severe AAH groups. The trend analysis showed significantly increasing trend of the M65:M30 ratio across the groups by severity in liver injury.

Supplement Fig. 6: Multivariate presentation of ROC curve and survival analyses (Kaplan-Meier (K-M) plots) for predicting 90-day mortality using K18M65 and K18M30 prognostic biomarkers in the severe arm patients. Covariates used are age, sex, INR, Total bilirubin, and WBC count. Fig. S6a: Multivariate K18M65. Fig. S6b: Multivariate K18M30. Fig. S6c: Multivariate K18M65. Fig. S6d: Multivariate K18M30.